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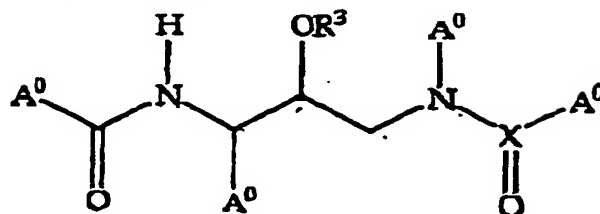
REITSTOETTER &amp; PARTNER

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## Claims:

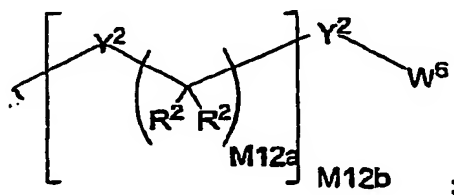
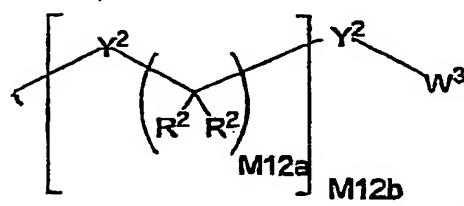
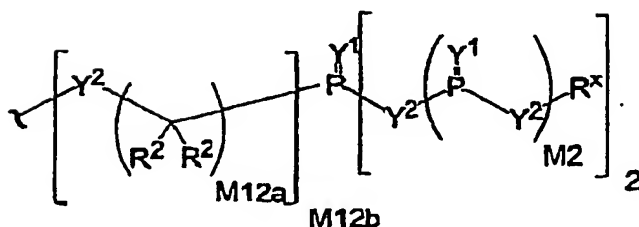
1. A compound of the Formula:



X = C, SO

II

wherein:

A<sup>0</sup> is A<sup>1</sup>, A<sup>2</sup> or W<sup>3</sup> with the proviso that the compound includes at least one A<sup>1</sup>;A<sup>1</sup> is:A<sup>2</sup> is:A<sup>3</sup> is:

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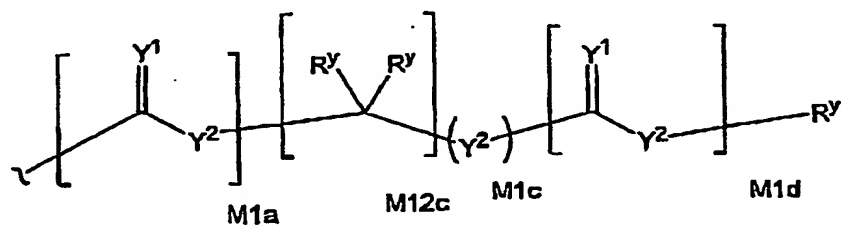
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$Y^1$  is independently O, S,  $N(R^x)$ ,  $N(O)(R^x)$ ,  $N(OR^x)$ ,  $N(O)(OR^x)$ ,  
or  $N(N(R^x)(R^x))$ ;

$Y^2$  is independently a bond, O,  $N(R^x)$ ,  $N(O)(R^x)$ ,  $N(OR^x)$ ,  $N(O)(OR^x)$ ,  
 $N(N(R^x)(R^x))$ ,  $-S(O)_{M2-}$ , or  $-S(O)_{M2-}S(O)_{M2-}$ ;

5  $R^x$  is independently H,  $R^1$ ,  $W^3$ , a protecting group, or the formula:



$R^y$  is independently H,  $W^3$ ,  $R^2$  or a protecting group;

10  $R^1$  is independently H or an alkyl of 1 to 18 carbon atoms;

$R^2$  is independently H,  $R^1$ ,  $R^3$  or  $R^4$  wherein each  $R^4$  is independently  
substituted with 0 to 3  $R^3$  groups, or taken together at a carbon atom, two  $R^2$   
groups form a ring of 3 to 8 carbons and the ring may be substituted with 0 to  
3  $R^3$  groups;

15  $R^3$  is  $R^{3a}$ ,  $R^{3b}$ ,  $R^{3c}$  or  $R^{3d}$ , provided that when  $R^3$  is bound to a  
heteroatom, then  $R^3$  is  $R^{3c}$  or  $R^{3d}$ ;

$R^{3a}$  is F, Cl, Br, I, -CN,  $N_3$  or  $-NO_2$ ;

$R^{3b}$  is  $Y^1$ ;

20  $R^{3c}$  is  $-R^x$ ,  $-N(R^x)(R^x)$ ,  $-SR^x$ ,  $-S(O)R^x$ ,  $-S(O)_2R^x$ ,  $-S(O)(OR^x)$ ,  $-S(O)_2(OR^x)$ ,  
 $-OC(Y^1)R^x$ ,  $-OC(Y^1)OR^x$ ,  $-OC(Y^1)(N(R^x)(R^x))$ ,  $-SC(Y^1)R^x$ ,  $-SC(Y^1)OR^x$ ,  
 $-SC(Y^1)(N(R^x)(R^x))$ ,  $-N(R^x)C(Y^1)R^x$ ,  $-N(R^x)C(Y^1)OR^x$ , or -  
 $N(R^x)C(Y^1)(N(R^x)(R^x))$ ;

$R^{3d}$  is  $-C(Y^1)R^x$ ,  $-C(Y^1)OR^x$  or  $-C(Y^1)(N(R^x)(R^x))$ ;

25  $R^4$  is an alkyl of 1 to 18 carbon atoms, alkenyl of 2 to 18 carbon atoms,  
or alkynyl of 2 to 18 carbon atoms;

$R^5$  is  $R^4$  wherein each  $R^4$  is substituted with 0 to 3  $R^3$  groups;

$W^3$  is  $W^4$  or  $W^5$ ;

$W^4$  is  $R^5$ ,  $-C(Y^1)R^5$ ,  $-C(Y^1)W^5$ ,  $-SO_2R^5$ , or  $-SO_2W^5$ ;

30  $W^5$  is carbocycle or heterocycle wherein  $W^5$  is independently substituted  
with 0 to 3  $R^2$  groups;

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$W^6$  is  $W^3$  independently substituted with 1, 2, or 3  $A^3$  groups;

$W^7$  is a heterocycle bonded through a nitrogen atom of said heterocycle and independently substituted with 0, 1 or 2  $A^0$  groups;

M2 is 0, 1 or 2;

5

M12a is 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12;

M12b is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12;

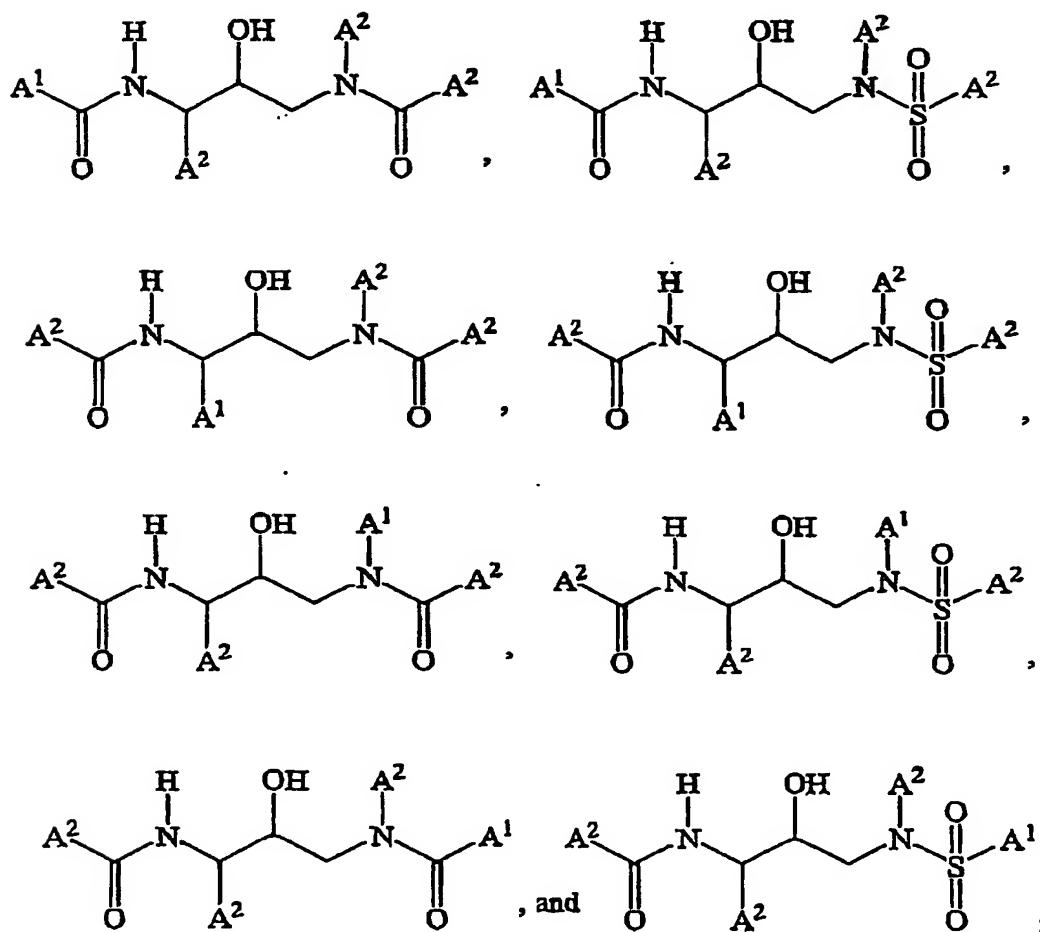
M1a, M1c, and M1d are independently 0 or 1; and

M12c is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12, and

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the enantiomers and diastereomers, as well as the physiologically acceptable salts and prodrugs thereof.

2. A compound of claim 1 selected from:



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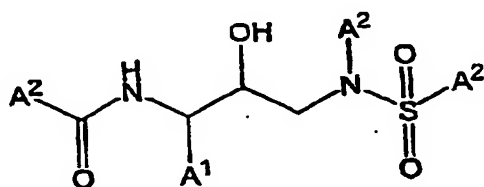
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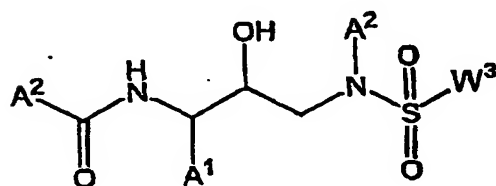
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3. A compound of claim 2 having the formula:



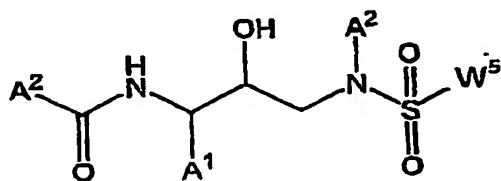
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4. A compound of claim 1 having the formula:



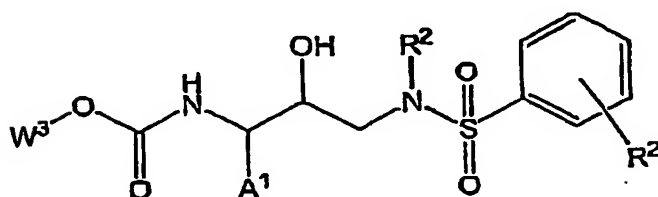
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5. The compound of claim 4 having the formula:



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6. A compound of claim 5 having the formula:



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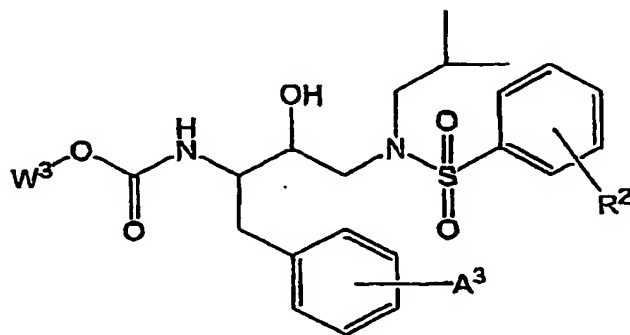
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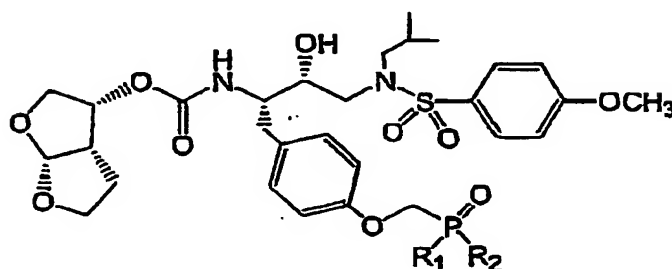
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7. A compound of claim 6 having the formula:



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8. A compound of claim 7 having the formula:

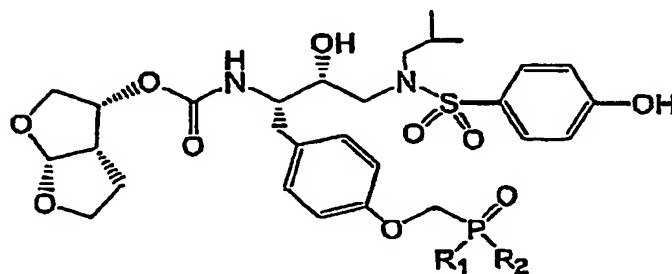


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wherein  $R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxymethyl.

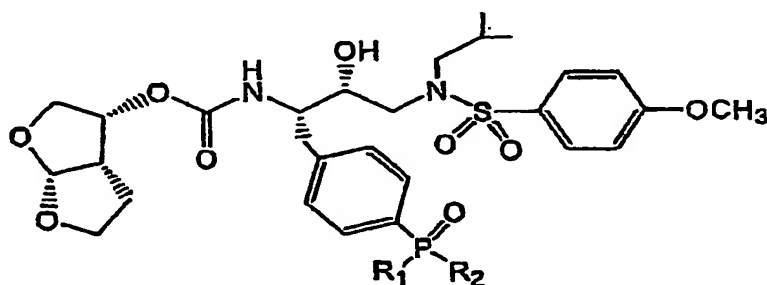
9. A compound of claim 7 having the formula:

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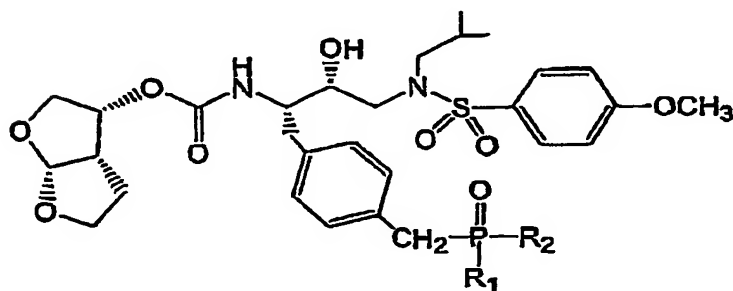
wherein  $R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxymethyl.

10. A compound of claim 7 having the formula:



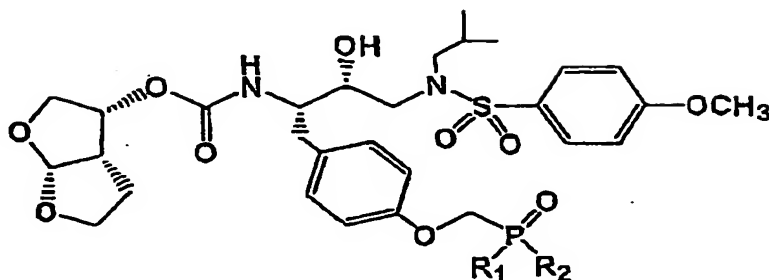
wherein  $R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxymethyl.

11. A compound of claim 7 having the formula:



wherein  $R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxymethyl.

12. A compound of claim 7 having the formula:



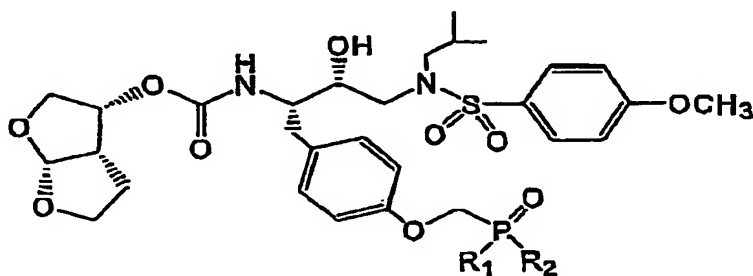
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wherein  $R_1$  and  $R_2$  are independently selected from  $-NR$  where  $R$  is  $C_1-C_8$  alkyl or an amino acid ester.

13. The compound of claim 12 wherein  $R_1$  and  $R_2$  are independently selected from  $-NMe$ ,  $-NEt$ ,  $Gly-Et$ ,  $Ala-Et$ ,  $Aba-Er$ ,  $Val-Et$ ,  $Leu-Et$ ,  $Phe-Bu$ , and  $Phe-Et$ .

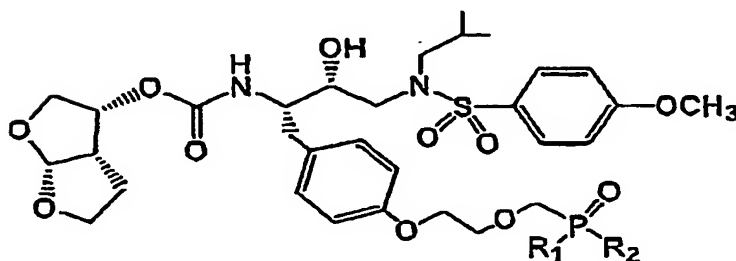
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14. A compound of claim 7 having the formula:



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or



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wherein  $R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, O-pivaloyloxymethyl, and a lactate ester.

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15. The compound of claim 14 wherein  $R_1$  is hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, substituted phenoxy or benzyloxy; and  $R_2$  is Glc-Et, Lac-Me, Lac-Et, Lac-iPr, Lac-Bu, Lac-EtMor, Lac-Me, Lac-Et, Lac-Bn, Lac-Bn, Lac-OH, Lac-OH, Hba-Et, Hba-tBu, Hba-OH, MeBut-Et, or DiMePro-Me.

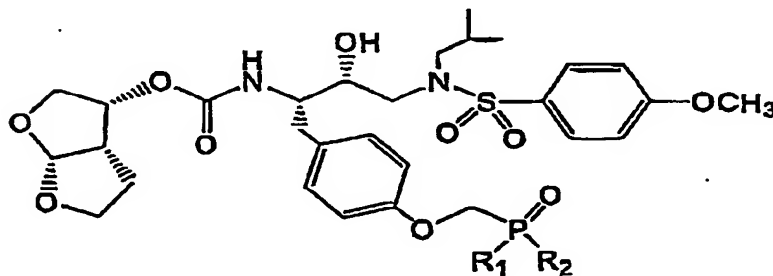
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16. A compound of claim 15 where the lactate ester is the (R) configuration.

17. A compound of claim 15 where the lactate ester is the (S) configuration.

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18. A compound of claim 7 having the formula:



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wherein  $R_1$  is phenoxy, benzyloxy, ethoxy, trifluoroethoxy, or hydroxyl; and  $R_2$  is an amino acid ester.

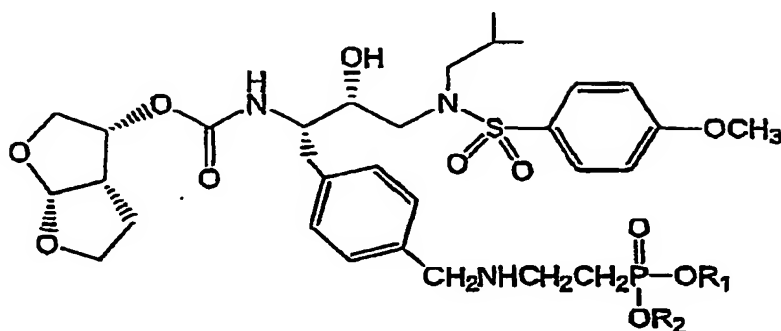
19. The compound of claim 18 wherein the amino acid ester is selected from Gly-Bu, Ala-Me, Ala-Et, Ala-iPr, (D)Ala-iPr, Ala-Bu, Aba-Et, Aba-Bu, and Ala-OH.

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20. A compound of claim 7 having the formula:

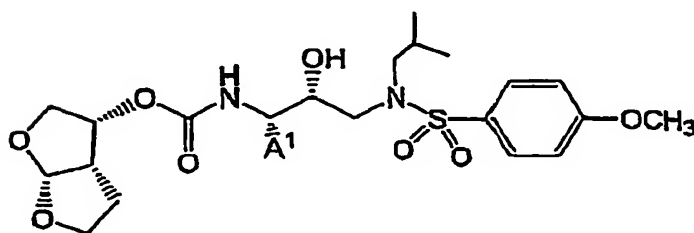


5 wherein  $R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, O-pivaloyloxy-methyl, an amino acid ester and a lactate ester.

21. The compound of claim 20 wherein  $R_1$  is hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, substituted phenoxy or benzyloxy; and  $R_2$  is a lactate ester selected from Glc-Et, Lac-Me, Lac-Et, Lac-iPr, Lac-Bu, Lac-EtMor, Lac-Me, Lac-Et, Lac-Bn, Lac-Bn, Lac-OH, Lac-OH, Hba-Et, Hba-tBu, Hba-OH, MeBut-Et, and DiMePro-Me.

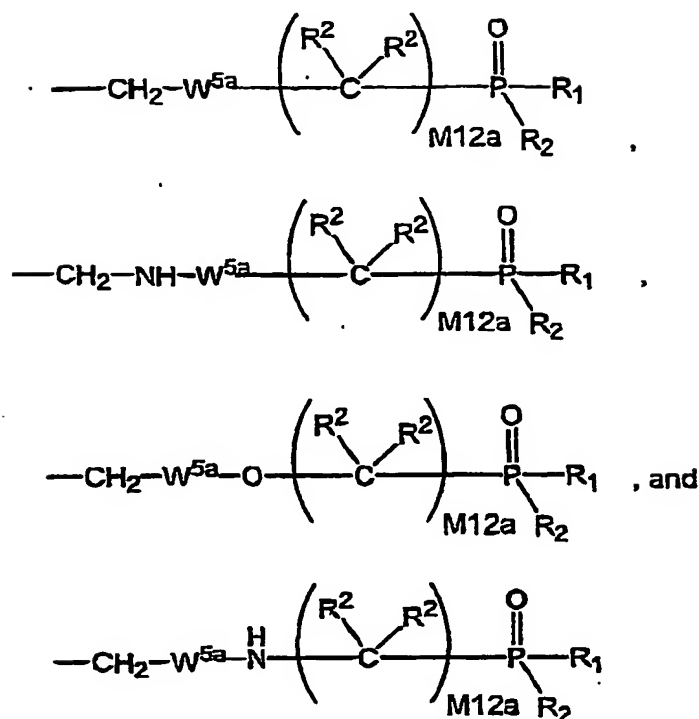
22. The compound of claim 20 wherein  $R_1$  is hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, substituted phenoxy or benzyloxy; and  $R_2$  is an amino acid ester selected from Gly-Bu, Ala-Me, Ala-Et, Ala-iPr, (D)Ala-iPr, Ala-Bu, Aba-Et, Aba-Bu, and Ala-OH.

23. A compound of claim 1 having the formula:



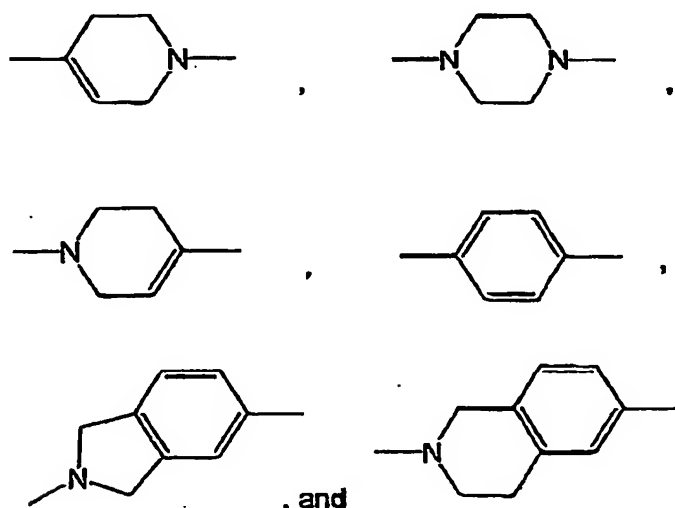
wherein  $A^1$  is selected from the formulas:

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$R_1$  and  $R_2$  are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, O-pivaloyloxymethyl, an amino acid ester and a lactate ester; and

$W^{5a}$  is selected from the formulas:



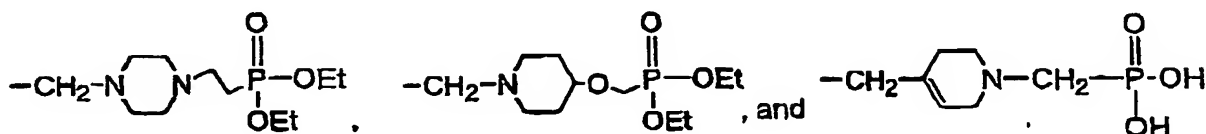
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24. A compound of claim 23 wherein A<sup>1</sup> is selected from the formulas:



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25. The use of a compound according to any one of claims 1 to 24 in the manufacture of a medicament for the treatment of HIV infection.

10 26. The use of a compound according to any one of claims 1 to 24 in the manufacture of a medicament for the treatment of disorders affecting white blood cells.

15 27. A pharmaceutical composition comprising a compound according to anyone of claims 1 to 24 and conventional carriers and excipients.